

GENERAL

SOIL PREPARATION NOTES:

1. THE FOUNDATION DESIGN IS BASED ON AN ALLOWABLE BEARING PRESSURE OF 1,500 PSF AS PROVIDED IN THE 2006 VIRGINIA UNIFORM STATEWIDE BUILDING CODE. SHOULD THE OWNER'S GEOTECHNICAL/STRUCTURAL ENGINEER DETERMINE THAT THE IN PLACE SOILS HAVE AN ALLOWABLE CAPACITY LESS THAT 1,500 PSF, A GEOTECHNICAL REPORT WILL BE REQUIRED.
2. PROVIDE POSITIVE DRAINAGE FOR ALL TRENCHES DURING CONSTRUCTION. DO NOT ALLOW ANY PONDING OF WATER DURING CONSTRUCTION.
3. THE SOIL BENEATH THE BUILDING AND 5 FEET AROUND THE PERIMETER SHALL BE TREATED AS FOLLOWS, UNLESS NOTED OTHERWISE BY GEOTECHNICAL REPORT:
 - A. STRIP THE AREA OF ALL VEGETATION
 - B. PROOF ROLL THE SITE WITH A TANDEM AXLE LOADED DUMP TRUCK IN TWO DIRECTIONS. ANY AREAS WHICH ARE NOTED TO RUT OR PUMP EXCESSIVELY SHALL BE UNDERCUT AND BACKFILLED WITH COMPACTED ON SITE SOIL OR SELECT FILL ACCORDING TO THE COMPACTED REQUIREMENTS NOTED BELOW.
 - C. THE FILL REQUIRED TO RAISE THE BUILDING TO BENEATH THE FLOOR SLAB SHALL BE EITHER ON SITE FILL OR SELECT FILL. THE SELECT FILL SHALL HAVE A PLASTIOTY INDEX BETWEEN 5 AND 15 AND A LIQUID LIMIT LESS THAN 30. PLACE THE ON-SITE FILL OR SELECT FILL IN 8 INCH LIFTS AND COMPACT TO AT LEAST 95% OF THE STANDARD PROCTOR. ANY AREAS OF LOOSE FILL OR DELETERIOUS MATERIALS SHALL BE REMOVED AND FILLED AS NOTED.
4. THE FOUNDATION DESIGN DOES NOT APPLY TO SITES ON EXPANSIVE SOIL, LOCATIONS WITH A WATER TABLE WITHIN 5 FEET OF THE SURFACE, AREAS OF KNOWN HIGH SEISMIC ACTIVITY OR AREAS WITH SOIL WHERE THE STRENGTH IS QUESTIONABLE SUCH AS FILL (AS REQ'D IN IBC SECTION 1802.2) EFFORT HAS BEEN MADE TO VERIFY THAT THE SUPPORTING SOILS ARE ADEQUATE. IF CONDITIONS SUCH AS THOSE MENTIONED ABOVE EXIST, CONTACT THE ENGINEER.

CONCRETE NOTES:

1. ALL CONCRETE SHALL HAVE A 28 DAY DESIGN COMPRESSIVE STRENGTH OF 3,000 PSI, A MINIMUM OF 5 SACKS OF PORTLAND CEMENT PER CUBIC YARD, 3% TO 5% AIR CONTENT USING AIR ENTRAINING AGENT AS REQUIRED, 5 INCH SLUMP.
2. THE MID RANGE WATER REDUCING AGENT ADMIXTURES SHALL BE CHOSEN FROM ONE OF THE FOLLOWING:
 - i. EUCON X-30 BY EUCLID
 - ii. SILKMENT MP BY SIKA
 - iii. PLASTIMIX MR BY PROMIX TECHNOLOGIES
 - iv. MIRA 85 BY W.R. GRACE AND CO.
 - v. POLYHEED 1020 BY MASTER BUILDERSTHE AMOUNT OF MID RANGE WATER REDUCING AGENT SHALL BE AS RECOMMENDED BY THE ADMIXTURE SUPPLIER TO INCREASE THE SLUMP OF THE CONCRETE BY 50 PERCENT OVER THE SLUMP WITHOUT THE ADMIXTURE. THE SLUMP PROVIDED IS AT THE POINT OF DISCHARGE.
3. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE STANDARDS "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318-02) AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301-99)
4. REINFORCING STEEL SHALL BE NEW DOMESTIC DEFORMED BILLET STEEL CONFORMING TO A.S.T.M. A-615 GRADE 60.
5. REINFORCING BAR, BAR SUPPORTS, AND SPACERS SHALL BE DETAILED AND PROVIDED IN ACCORDANCE WITH THE A.C.I. DETAILING MANUAL. CHAIRS SHALL NOT BE PLACED FURTHER THAN 4 FEET APART. BAR SUPPORTS SHALL BE THE FOLLOWING DAYTON/RICHMOND PRODUCTS OR EQUAL:
 - A. AT SLABS-ON-GROUND: (SLAB THICKNESS MINUS 1 1/2 INCHES HIGH), TYPE BBP OR TYPE R21
 - B. AT FOOTINGS: 4 INCHES HIGH, TYPE R21
6. EPOXY ANCHORS, REBAR, OR THREADED RODS, SHALL BE EITHER HILTI HIT HY-150 MAX ANCHORS OR SIMPSON EPOXY - TIE (ET) ANCHORS. INSTALL ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. THIS INCLUDES CLEANING THE HOLE WITH AIR.

WOOD NOTES:

1. ALL FRAMING LUMBER SHALL BE #2 SOUTHERN PINE OR #2 DOUGLAS FIR-SOUTH OR GREATER.
2. PROVIDE SOLID BLOCKING AT MIDSPAN OF RAFTERS AND JOISTS OR AT A MAXIMUM OF 8 FEET ON CENTER OR AS INDICATED ON PLAN.
3. ALL STRUCTURAL LUMBER SHALL BE EITHER ACQ-C, ACQ-D (CARBONATE), CA-B, OR CBA-A PRESSURE TREATED LUMBER. EXCEPTIONS MAY BE TAKEN WITH THE PERMISSION OF THE ENGINEER.
4. ALL FASTENERS AND STEEL HARDWARE SHALL BE HOT-DIPPED GALVANIZED.
5. TONGUE AND GROOVE ROOF DECKING TO BE TOENAILED ALONG COURSES WITH 8d NAILS AT 30 INCHES ON CENTER AND TO BE ATTACHED TO SUPPORTS WITH TWO 20g NAILS AT EACH COURSE.

THE FOLLOWING DESIGN LOADS WERE USED FOR THIS BUILDING BASED ON THE 2006 VIRGINIA UNIFORM STATEWIDE BUILDING CODE:

FLOOR LIVE LOADS: 100 PSF

ROOF LIVE LOAD: 20 PSF

GROUND SNOW LOAD: 30 PSF
FLAT ROOF SNOW LOAD: 25.2
SNOW EXPOSURE FACTOR: 1.0
SNOW LOAD IMPORTANCE FACTOR: 1.0
THERMAL FACTOR: 1.2

WIND DESIGN DATA:
BASIC WIND SPEED (3 SECOND GUST): 120 MPH
WIND IMPORTACE FACTOR=1.0
OCCUPANCY CATEGORY: II
WIND EXPOSURE CATEGORY: C
INTERNAL PRESSURE COEFFICIENTS: +/- 0.0 (FOR CANOPIES)
ALL NEW COMPONENTS AND CLADDING NOT DESIGNED BY THE ENGINEER SHALL BE DESIGNED FOR 25 PSF UNLESS OTHERWISE APPROVED BY THE ENGINEER.

EARTHQUAKE DESIGN DATA:
SEISMIC IMPORTANCE FACTOR, I: 1.0
SEISMIC USE GROUP: II
MAPPED SPECTRAL RESPONSE ACCELERATIONS: SS=0.448 S1=0.133 SDS=0.431 SD1=0.202
SITE CLASS: D
SEISMIC DESIGN CATEGORY: D
BASIC SEISMIC-FORCE-RESISTING SYSTEM: CANTILEVERD TIMBER COLUMNNS
DESIGN BASE SHEAR: 2.71 kips
SEISMIC RESPONSE COEFFICIENT: Cs=0.28
RESPONSE MODIFICATION FACTOR: R=1.5
ANALYSIS PROCEDURE USED: EQUIVALENT LATERAL FORCE METHOD

FLOOD HAZARD INFORMATION:
THIS BUILDING IS NOT DESIGNED FOR FLOOD LOADS.

SPECIAL NOTE:
THIS BUILDING WAS DESIGNED FOR THE ASSUMED DESIGN LOADS ABOVE. SHOULD THE BUILDING OFFICIAL DETERMINE THAT CONDITIONS WORSE THAN THE ASSUMED DESIGN LOADS EXIST, THIS OFFICE SHOULD BE NOTIFIED PRIOR TO CONSTRUCTION.

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1	ISSUED FOR CONSTRUCTION	KJA	BW	09/29/08

COMMONWEALTH OF VIRGINIA
DEPT. OF CONSERVATION & RECREATION
101 N. 14TH ST., 11TH FLOOR, MONROE BLDG.
RICHMOND, VA 23219
PROJECT CODE: 199-08199-003

PROTOTYPICAL STRUCTURE PROJECT
SMALL PICNIC SHELTER
COMMONWEALTH OF VIRGINIA
DEPT. OF CONSERVATION & RECREATION
101 N. 14TH ST., 11TH FLOOR, MONROE BLDG.
RICHMOND, VA 23219
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PROTOTYPICAL
PICNIC SHELTER - SMALL

GENERAL NOTES AND
SPECIAL INSPECTIONS

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